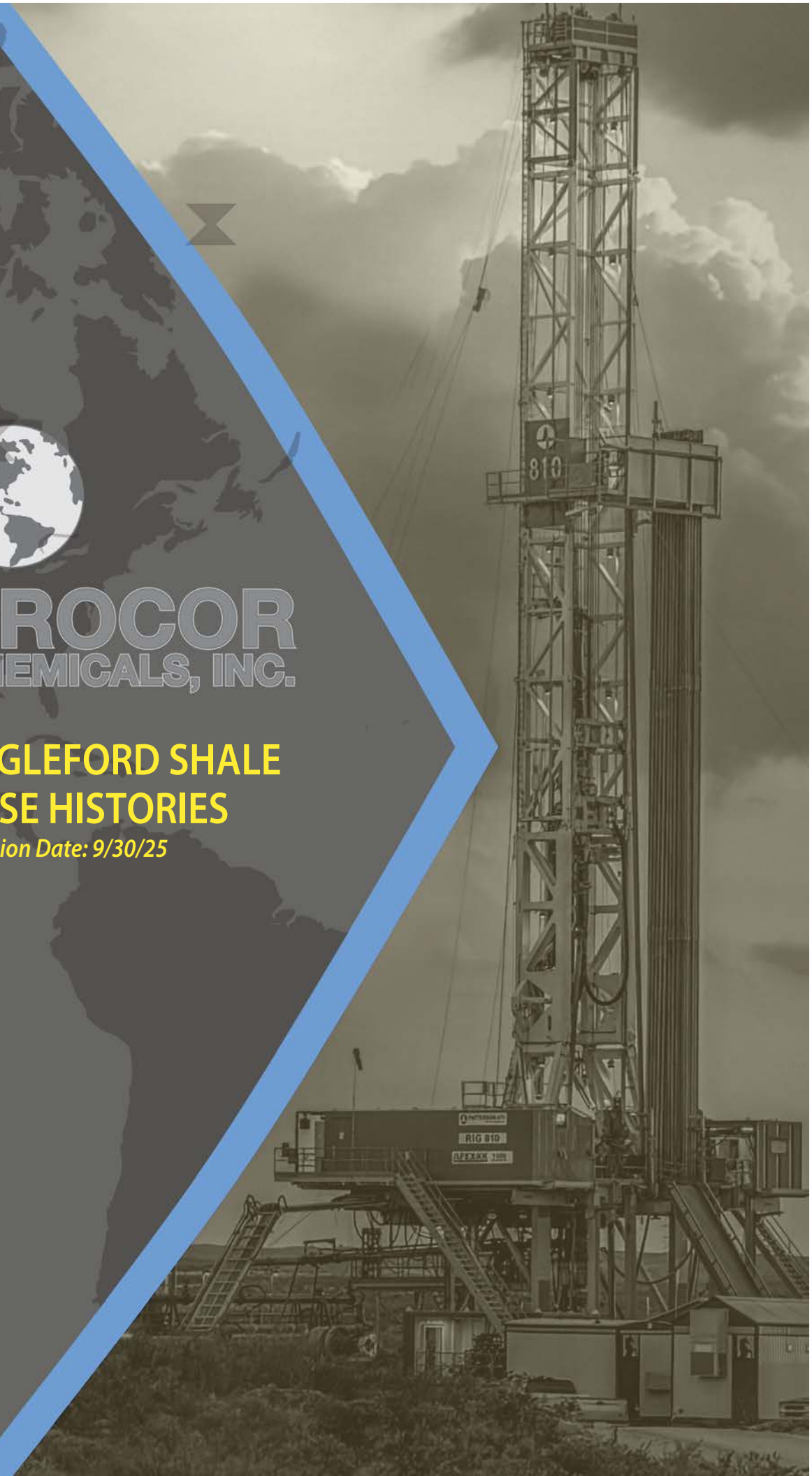
PROCOR
CHEMICALS, INC.

EAGLEFORD SHALE CASE HISTORIES

Revision Date: 9/30/25



PROCOR CHEMICALS, INC.

DATE: 9/30/25	SOUTH TEXAS/EAGLEFORD OPERATORS	

COMPANY NAME

Ageron Energy
Ageron
Ironroc Energy
Armor (Lonestar) Energy
Auterra Resources
BlackBrush Oil & Gas
Castlerock Exploration
Creative Oil & Gas
ConocoPhillips
Earthstone Operating
EOG Resources
Lime Rock Resources
Recoil Resources
Magnolia Oil & Gas
Modern Exploration
Mueller Exploration
NOV R&D
Overton Park Oil & Gas
Petralis Energy
Pillar Oil & Gas
Pioneer Natural Resources
Pursuit Oil & Gas
PXP
Riley Exploration
Rio Grande E&P
Rocky Creek Resources
Rusk Energy
Safari Production
Sandpoint Resources
Silver Hill Energy
SPRI Oil & Gas
Texas American Resources
Tidal Petroleum
Treadstone Energy
Warwick Artemis

PROCOR CHEMICALS, Inc., P.O. Box 81356, Lafayette, LA 70598-1356

South Texas, Eagleford Case Histories:

Webb County, TX – PRO V+, PRO x, PRE-CEMENT SPACER

Date: 2/3/26
Operator: Ageron Energy
Well: AL San Roman 113H
Field: Hawkvill/Austin Chalk
County: Webb County, TX
Rig: Ensign T137

Challenges:

The Operator TD the well at 20612' and ran 5.5" casing to bottom with losses but lost complete returns while attempting to circulate with casing on bottom.

Solutions/ Product Recommendation:

It was recommended to stop circulating, rig up the cementers, mix a 60 ppb PRO V+/PRO X pre-cement spacer and pump ahead of the cement slurry to minimize losses and to get a good cement job. The operator wanted to spot a 50 ppb pill across the suspected loss zone at 13943' and then pump cement.

Results

We circulated a surface to surface and TIH to bottom but tagged a bridge at 15385' circulated the hole clean with full returns staging the pump rate to 600gpm. We circulated a bottoms up and began washing to bottom with full returns. Once on bottom we began drilling with full returns and continued drilling. We will dilute the 80ppb pill back to 40ppb and pump sweeps to TD.

Notes

We mixed and pumped the 50 ppb PRO V+/PRO X pill with no returns but ran out of mud and ended up spotting the pill from 17241' to 16130'. The operator rigged up and pump cement and was able to get returns and get cement spacer to surface and a good cement job.

McMullen County, TX - SB SuperCeal, PRO V+, PRO X

Date: 9/30/25
Operator: Tidal Petroleum
Well: Franklin South D 4H
Field: Eagleville
County: McMullen County, TX
Rig: H&P 427

Challenges:

Operator drilled to 15439' stalled the motor, packed off, and lost complete returns with 12.4ppg/ OBM.

Solutions/ Product Recommendation:

The Operator requested a product recommendation and began building am 80bbl @ 80ppb PROCOR pill in the slugging tank (40ppb PRO V+, 30ppb PRO X, 10ppb SB SuperCeal). The company man realized they didn't have enough mud to spot the pill so they pulled to the top of the curve, finished building the pill and waited on mud. When mud arrived, we began circulating at the top of the curve at 10854' staging up the pumps from 150gpm to 325gpm with full returns.

Results

We circulated a surface to surface and TIH to bottom but tagged a bridge at 15385' circulated the hole clean with full returns staging the pump rate to 600gpm. We circulated a bottoms up and began washing to bottom with full returns. Once on bottom we began drilling with full returns and continued drilling. We will dilute the 80ppb pill back to 40ppb and pump sweeps to TD.

Notes

The 80ppb pill was mixed in the slugging tank and spotted with the rig pumps. The bit was placed at 4590' leaving 10 bbls of volume between the bit and the shoe. The pill was spotted with mostly full returns but we lost 10bbls below the bit when the rate was increaed to make the formation take the pill. We pulled two stands above the pill and allowed the pill to heal for one hour before beginning our hesitated squeeze. We observed a leak in the super choke so the manual choke was closed behind it and we only pumped down the drill pipe to minimize possible leaks. The pressure increased gradually but was pumping so we pumped 5bbls at a time and allowed the pill to heal 15 minutes to two hours to allow the pill to heal. The engineer in the office was ready to try something different so we talked him into pumping the remaininng 20 bbls into the formation and allowing the pill to heal for two hours before releasing the pressure and staging up the pump rate. When we staged up the pump rate we achieved the maximum desired pressure of 350gpm with no losses so the engineer decided to control drill through the Wilcox formation.

- Fayette County, TX – PTC/M, PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Date: 7/31/25
Operator: Magnolia O&G
Well: Cye Five HOS
Field: Giddings
County: Fayette County, TX
Rig: Patterson 248

Challenges:

While drilling, the operator took a 12 bbl kick and lost returns at 10,739' while drilling the intermediate section.

Solutions/ Product Recommendation:

The operator spotted the 30ppb PROCOR sweeps of (10ppb PROV+, 10ppb PRO Sweep Aid, 10ppb SB SuperCeal) that was in the slugging tank for preventative sweeps. It was recommended mixing and pumping 60ppb (30ppb PRO X, 20ppb PROV+, 10ppb SB SuperCeal) sweeps but the operator did not want to pump over 40ppb through the directional tools.

Results:

The 50 bbl 30ppb sweep was spotted on bottom and 10 stands were pulled off bottom. Returns were regained with 30-40 bbl/hr losses, so a 40ppb (20ppb PRO X, l0ppb PROV+, l0ppb SB SuperCeal) sweep was mixed and pumped while washing to bottom. Full returns were regained and the operator resumed drilling while pumping 20bbls@ 40ppb PROCOR sweeps to TD.

Fayette County, TX - PTC/M, PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Date: 6/25/25
Operator: Rio Grande E&P
Well Name: Summerbliss Two H02
Field: Giddings
County: Fayette County, TX
Rig: H&P 475

Challenges

Operator TD the intermediate section and lost returns. They suspect they experienced losses in the Olmos formation.

Soultions/ Product Recommendations

Operator made decision to load up the system with 17ppb LCM, PRO X

We also recommended spotting a pill above or across the thief zone to help with surge pressures while running casing and a pre-cement pill ahead of the cement slurry.

Results

Decision made to pull up above and attempt to circulate and then stage to bottom before coming out of the hole to run casing.

- Brazos County, TX – PRO V+

Date: 6/19/25
Operator: Holley Oil Company
Well: Elizabeth 1H
Field: Giddings
County: Brazos County, TX
Rig: Wisco Moran #7

Challenges:

The operator observed losses while drilling the 6-3/4" liner section in the Austin Chalk. OperatorTIH with lateral assembly after landing the curve in the 6-3/4" open hole; will drill two 3000' laterals, one in the Buda and one in the Pearsall formations

Solutions/ Product Recommendation:

The operator ran sweeps 20ppb PROV+ sweeps while drilling in the liner section and spotted a 40ppb PROV+ pill prior to POOH to run 5-1/2" casing at 8360' to aid with surge pressures.

Results:

The operator was successful in running the 5-1/2" liner to bottom with minimal losses and was able to get a good cement job. The operator successfully drilled the two lateral in the Buda and Pearsall formations.

Gonzales County, TX - PTC/M, PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Date:	4/15/25
Operator:	Auterra Resources
Well Name:	Raeke Cooke AW 1H
Field:	Eagleville
County:	Gonzales County, TX
Rig:	Patterson 285

Challenges:

Operator running preventative sweeps to prevent fluid losses, wellbore stability while drilling. Ensuring a successful cement job.

Solutions/ Product Recommendations:

Pumped preventative sweeps including SB SuperCeal, PRO Sweep Aid, PRO TightCeal/M products as needed. Also have more aggressive products PRO V+ / PRO X for contingency sweeps if needed.

Results

Successfully drilled to TD with minimal fluid losses. Successfully cemented casing with returns.

LaSalle County, TX - PTC/M, PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Date:	3/25/25
Operator:	Texas American Resources
Well:	Burns Ranch 153H
Field:	Eagleville (Eagle Ford-1)
County:	LaSalle County, TX
Rig:	Ensign T120

Challenges

Drilling the 4th lateral on a 4-well pad on the 153H at 12,167'; had some seepage losses in the Austin Chalk

Solutions / Product Recommendations

We recommended pumping 5ppb PRO Sweep Aid to be included with the current sweeps of 5ppb Chek Loss to control the seepage; PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Results

17,365' with no losses; did not encounter losses in the Olmos and Austin Chalk formations.

Gonzales County, TX - PTC/M, PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X

Date:	1/9/25
Operator:	Magnolia O&G
Well:	Louie One H01 LC
Field:	Giddings
County:	Washington County, TX
Rig:	H&P 475

Challenges

Wellbore stability, preventing fluid losses, successful cementing job.

Solutions/ Product Recommendations

Operator pumping 20ppb preventative sweeps of 7.5ppb PRO Sweep Aid, 7.5ppb SB SuperCeal and 5ppb CalCarb every 300ft drilled; will continue sweeps throughout the lateral.

Results

Drilling the lateral on the 1st well of a 4-well pad on the H01 at 13231'; Successfully drilled to TD with minimal fluid losses, successfully cemented casing with returns.

- *Washington County, TX* – *SB SuperCeal, PRO SweepAid, PRO V+, PRO X*

Date: 11/21/24
Operator: Magnolia O&G
Well: Commodore Six H06 MC
Field: Giddings
County: Washington County, TX
Rig: H&P 541

Challenges:
TD the 1st intermediate section on a 4-well pad at 10195' and took a kick; had to kill with 100 bbls of 14.5 OBM because the separator had a crack so they were not able to circulate it out.

Solutions/ Product Recommendation:
Running sweeps with a mixture of SB SuperCeal, PRO Sweep Aid, also carrying contingency products PROV+, PRO X for high fluid loss or squeeze..

Results:
Washed to bottom to run 7-5/8" casing.

Webb County, TX

Date: 8/9/24
Operator: Rio Grande E&P
Well: Junco Ranch 1H
Field: Hawkville
County: Webb County, TX
Rig: H&P 536

Challenges:
The operator drilled out of intermediate casing and attempted to obtain a casing shoe test of 17.0 EMW but was unsuccessful with the pressure leaking off.

Solutions/ Product Recommendation:
This Operator is familiar with running our products did not reach out to PROCOR for assistance or recommendations on squeezing the shoe, so they mixed and squeezed an 80bbl pill with 25ppb SB SuperCeal, 30ppb Calcium Carbonate-30 and 30ppb Calcium Carbonate-50ppb.

Results:
The operator was only able to achieve a maximum squeeze of 15.1ppg EMW with the mud engineer's pill combination. The operator decided to drill ahead with a maximum mud weight of 14.6ppg while pumping preventative sweeps of 10ppb PRO Sweep Aid and 10 ppg Calcium Carbonate every 100ft drilled. The operator was able to drill to the pilot hole TD with no losses. After the fact, we informed their mud engineer we would have recommended pumping, 40ppb PRO X, 30ppb

PRO V+ and 10ppb SB SuperCeal, but we're concerned about plugging the directional tools. We explained we have pumped this concentration many times and offered to go out to location and assist. The mud engineer was convinced they had a bad cement job on the intermediate casing string.

- *Fayette County, TX*

Date: 6/27/24
Operator: Magnolia Oil & Gas
Well: Summerbliss Two H02
Field: Giddings
County: Fayette County, TX
Rig: H&P 475

Challenges:
Drilling the 1st intermediate section on a 3-well pad at 9893'.

Solutions/ Product Recommendation:
Pumping preventative sweeps of 7.5ppb PROTightCeal Medium and 7.5ppb Calcium Carbonate sweeps every 300ft drilled. Also carrying SB SuperCeal and PRO Sweep Aid to incorporate in sweeps as needed.

Results:
Successfully TD well minimizing fluid losses.

- *Gonzales County, TX*

Date: 6/25/24
Operator: Auterra Operating
Well: Tinsley Lester AW 1H
Field: Eagleville
County: Gonzales County, TX
Rig: Ensign T120

Challenges:
Operator experienced fluid losses drilling the lateral section.

Solutions/ Product Recommendation:
Pumped more aggressive PRO V+ / PRO X sweeps , Pumping 30ppb sweeps (15ppb PRO V and 15ppb PRO X) every 100ft drilled until losses were controlled.

Also carried on location PRO V+, PRO X, SB SuperCeal, PRO Sweep Aid, PRO TightCeal/M products to apply as needed.

Results:
Minimized fluid losses and TD the well on a 2-well pad and successfully cemented production casing. Also pumped a 30ppb PV/PX Pre-Cement Spacer to ensure a good cement job.

- *Atascosa County, TX*

Date: 5/20/24
Operator: Tidal Petroleum
Well: Post Oak 1H 2nd pill
Field: Eagleville
County: Atascosa County, TX
Rig: H&P 503

Challenges:
The operator did not get the desired shoe test of 13.5 EMW with the shoe leaking off at 12.9 EMW. The operator drilled ahead and began losing mud while drilling the Wilcox formation and lost complete returns at 4984'.

Solutions/ Product Recommendation:
It was recommended to mix and spot an 80ppb (35# PRO V / 35# PRO X / 10# SBSC) pill at 4590' and squeeze into the shoe and Wilcox formation.

The 80ppb pill was mixed in the slugging tank and spotted with the rig pumps. The bit was placed at 4590' leaving 10 bbls of volume between the bit and the shoe. The pill was spotted with mostly full returns but we lost 10bbls below the bit when the rate was increased to make the formation take the pill. We pulled two stands above the pill and allowed the pill to heal for one hour before beginning our hesitated squeeze. We observed a leak in the super choke so the manual choke was closed behind it and we only pumped down the drill pipe to minimize possible leaks. The pressure increased gradually but was pumping so we pumped 5bbls at a time and allowed the pill to heal 15 minutes to two hours to allow the pill to heal. The engineer in the office grew impatient and was ready to try something different so I talked him into pumping the remaining 20 bbls into the formation and allowing the pill to heal for two hours before releasing the pressure and staging up the pump rate. When we staged up the pump rate we achieved the maximum desired pressure of 350gpm with no losses so the engineer decided to control drill through the Wilcox formation.

We encountered a leaking choke so the manual choke was closed and we suspected the kill line to be leaking so we only pumped down the drill pipe. We observed better pressures during the squeeze process. We also found out that there were two disposal wells within 8000ft of the wellbore that were injecting into the Wilcox formation.

Results:
We were successful in regaining full returns and returning the operator to drilling.

- *Atascosa County, TX*

Date:	5/19/24
Operator:	Tidal Petroleum
Well:	Post Oak 1H
Field:	Eagleville
County:	Atascosa County, TX
Rig:	H&P 503

Challenges:
The operator did not get the desired shoe test of 13.5 EMW with the shoe leaking off at 12.9 EMW. The operator drilled ahead and began losing mud while drilling the Wilcox formation and lost complete returns at 4984'.

Solutions/ Product Recommendation:
Products used were 45ppb PRO V+, 40ppb PRO X It was recommended to mix and spot an 85ppb (45# Pro V / 40# Pro X) pill at 4704' and squeeze into the shoe and Wilcox formation.

The 85ppb pill was mixed in the slugging tank and spotted with rig pumps at 4704' with no returns. We pulled 14 stands to get away from the shoe and allowed the pill to heal for four hours before attempting to circulate. We were able to circulate with full returns after waiting four hours with the bit at 3460' so we began our hesitated squeeze. We pumped on the pill at 1.0bpm with a maximum pressure of 103psi observed with a total of 18bbls pumped. It was recommended to trip to 4590' and attempt to circulate and stage up the pump rate to apply ECDs and to see if it would hold. The operator only wanted to circulate to 250gpm before deciding to spot and squeeze a second pill.

Results:
We were able to regain returns but were not able to achieve the desired squeeze pressure of 660psi (13.5 EMW) so a second pill was spotted.

- *Dewitt County, TX*

Date:	3/7/24
Operator:	Recoil Resources
Well:	Sekula A 4H
Field:	Eagleville
County:	Wilson County, TX
Rig:	Ensign T120

Challenges:
Operator drilling is South TX has had a history mud losses in the Austin Chalk while building angle and drilling the lateral.

Solutions/ Product Recommendation:
Pumping preventative sweeps every 300' with PRO Sweep Aid @ 10ppb, also carrying full bundle of Contingency Squeeze products, PRO V+, PRO TightCeal M and PRO X

Results:
The operator encountered seepage losses while building the curve and began pumping 30# ProCor sweeps (10ppb PRO V+, 10ppb PRO X, and 10ppb SB SuperCeal) to heal the mud losses. Once the losses were controlled the operator returned to pumping 10ppb PRO Sweep Aid sweeps every 300ft. At TD of the well the operator pumped an 80bbl 30ppb PRO V+ pre-cement pill to ensure cement to surface which was completely successful.

- *DeWitt County, TX*

Date:	12/04/23
Operator:	ConocoPhillips
Well:	A Mueller A-Koehler A USW G1
Field:	Cuero East
County:	DeWitt County, TX
Rig:	H&P 384

Challenges:
Operator expecting fluid losses when drilling through the Wilcox @ 8,500' , Lateral starts @ 12,200', planned TD @ 21,401'.

Solutions/ Product Recommendation:
We have the system fully treated w 8ppb. They are drilling at 500'/hr, 7bbls dilution per hour which is very good 37.18bbls per 500' @ 7bbls dilution = .18. That's very good. We have treatment at 5sx per hour which is just under 5ppb but they are doing cutting/LCM recovery so that is fine.

Results:
Drilling the lateral at 17099' with 5ppb SB SuperCeal in the active system; maintaining 5ppb SBSC in the system with an hourly treatment of 2sx per hour; dilution rate of 14.31 bbl/hr; currently drilling through critical zone in the lateral from 13,500' to 18,000'; pumping 20ppb Baracarb 150/Walnut sweeps every 500ft in the lateral; mud engineer said the mud looks good and SBSC not properties not adversely affecting rheology.

- *Bee County, TX*

Date:	12/21/23
Operator:	Warwick-Artemis LLC
Well:	Bumble Bee B 3LH
Field:	Sugarkana
County:	Bee County, TX
Rig:	161

Challenges:
The operator lost returns in the original hole and lost a total of 1800 bbls to the Wilcox formation. The operator drilled ahead but ended up sticking the drill pipe on the original and had to drill a sidetrack. The operator anticipated additional fluid losses in suspected thief zone at 6,800' (Wilcox Formation), needed to prevent/stop fluid losses while drilling the Wilcox formation, and strengthen/stabilize their wellbore. The operator currently had an 11.4# OBM and needed an equivalet mud weight of 12.5# to be able to drill the lateral.

Solutions/ Product Recommendation:
Treated the active system with 8ppb SB SuperCeal while circulating at KOP at 12658'; built an 80 bbl 30 ppb (25# PSA + 5# SBSC) sweep in the slugging tank; once the entire system was treated the operator began applying backside pressure with MPD (Managed Pressure Drilling) staging the ECDs to a maximum of 12.52 EMW; a 20 bbl sweep was pumped around and recommended to increase the applied pressure as the sweep crossed the suspected thief zone at 6800' (Wilcox Formation); a total of 35 bbls was lost while circulating at 600 gpm and applying pressure but levelled off once the sweep crossed the loss zone; the operator released the backside pressure and began drilling the lateral; I spoke with the mud engineer and he said they are drilling and all looks good; increased the mud weight from 11.3 to 11.5 ppg; continued with recommended 4sx of SBSC per hour and pumping 30# ProCor sweeps every 300ft drilled

Results:
The operator drilled the lateral to a depth of 18,266' with minor seepage of 10 bbl/hr. The operator drilled a fault at 18266', lost returns, and took a kick building 1500 psi on the backside. The operator was able to regain returns after pumping several LCM sweeps but did not move the drill pipe for over 24hrs so the pipe became stuck. The operator took another kick while circulating and ended up losing returns a second time. The operator was stuck up in the Wilcox formation to the shoe so they decided to retrieve as much drill pipe as possible and produce through the drill pipe.

- *Karnes County, TX*

Date:	12/10/23
Operator:	Blackbrush Oil & Gas
Well:	Apollo Unit 25H
Field:	Eagleville
County:	Karnes County, TX
Rig:	Nabors 887

Challenges
Operator experiencing fluid losses and ballooning. Needing to weight up to > 9.5ppg to stabilize wellbore and prevent hole from collapsing. Also had MPD head failure causing more issues having to TOH.

Solutions/ Product Recommendation
Once on location started mixing 8 ppb of SB SuperCeal into active system. For dilution added 5 sacks of SB SuperCeal every hour to active system. Moved 80 bbls of active fluid over to slug pit and mixed 20 ppb PRO Sweep Aid, 10 ppb SB SuperCeal, will start sweeping hole once curve is complete.

They got a mud cap spotted, pulled mpd tool and had major losses. Continued with system treatment 8ppb of SB SuperCeal losses down to 2ppb and dusted up to increase mud weight.

TOH to change out motor due to not getting the build that was needed. TIH at time of report at a depth of 4,752'. Once back on bottom we resumed treatment of SB SuperCeal 8 ppb into the active system. Once dilution is started we will continue adding SB SuperCeal to maintain 8 ppb of SB SuperCeal.

Results
Drilling ahead building the curve at 10,497'. Since drilling we have maintained losses of 10 bbl/hr. Drilled to a total depth of 14,220'. Circulating to TOH and run casing. Maintain 8 ppb SB SuperCeal in active system. Will have product transferred to next well on pad. Losses were consistent at 10-20 bbls per hour with the well ballooning during each connection.

Operator's Drilling Eng was complimentary of the application said it worked great cut down losses significantly and greatly improved the shaker issue all the other products caused.

- *Dewitt County, TX*

Date:	8/22/23
Operator:	ConocoPhillips
Well:	Hooks 1-A USW A1
Field:	Cuero East
County:	DeWitt County, TX

Challenges:
Unable to drill ahead due to losses and circulation problems. Goal is to stop losses and return to drilling.

Solutions/ Product Recommendation:
Baroid STOPPIT, SteelSeal, BARABLOK; 2 X Pills 100 bbls 110 PPB. 1st Pill OBM PV 60 ppb PX 60 ppb. 2nd Pill Water Based from Scratch, 30 HG, 30 PV, 50 PX. 1st Pill 200 X PV, 240 X PX. 2nd Pill 75 X HG, 120 X PV, 200 X PX. Products were mixed through the mixing hopper into a 105 bbl slugging pit then pumped using standard rig pumps. Water, 65 bbls, 5 sx Gel, 200 X PX, 120 PV, Barite to weight, HG then pump.

Results:
It is my understanding that the drilling requirements of setting casing successfully were met on HP 256. Furthermore, it is to my understanding that the fact that we were able to hold pressure gave them the green light to go ahead with the plan. Sometimes we get to declare total victory but sometimes we just help the cause. It is to my understanding that in this case we helped the cause and made a good imprssion as well. I.e., the order of additional material to be on site for the next 4 wells.

Change recommendation for great wait times initially in order to avoid discussions and negotiations requesting time. Its better to lay the ground rules prior to arriving at the locations.

- Karnes County, TX

Date:	3/23/23
Operator:	Magnolia Oil & Gas Operating LLC
Well:	Dragon Unit H04
Field:	Eagleville
County:	Karnes County, TX
Rig:	Patterson 285

Challenges:
Operator experiencing complete fluid losses while raising the mud weight from 11.7 to 11.8ppg.

Solutions/ Product Recommendation:
PROCOR recommended spotting a 30ppb PRO V+ , PRO X, SB SuperCeal pill on bottom and spotted an 80 bbl 50ppb PRO V+ , PRO X, SBSC, PRO TightCealM pill at the shoe and allowed to heal for four hours; followed up with sweeps, pumping 30ppb PV, PX, SBSC sweeps every hour and adding 4sx PSA, PTCM, SBSC to the system every hour. Performed an ECD squeeze staging up the pump rate from 250 gpm to 600 gpm; returns were regained but the well began ballooning taking 54bbls and giving back 45bbls; Staged to bottom and staging up the pumps at every stop and cut the mud weight to 11.2; got back to bottom and staged the pumps up circulated 11.2 around and resumed drilling.

Results:
Back to drilling after losing complete returns